

REMARKS

Applicants appreciate the consideration of the present application afforded by the Examiner. Claims 30, 31, 36-38, 43-46, 51-54 and 59-61, 63-69 are pending. Claims 30, 31, 37, 38, 52, 61 and 63 are independent. Claim 62 has been canceled. Claims 65-69 are new but do not add new matter. Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

Interview Summary

Applicants thank the Examiner for the courtesies extended during the Personal Interview conducted on April 20, 2009, during which the rejections under 35 U.S.C. § 101 and 35 U.S.C. § 112, second paragraph were discussed. During the interview, the Examiner agreed that clarifying amendments would overcome the rejections under 35 U.S.C. § 101 and 35 U.S.C. § 112, second paragraph.

Claim Rejections under 35 U.S.C. §101

Claims 38, 52-54 and 63 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicants traverse the rejection.

According to the Examiner, claims 38 and 52 are allegedly directed to non-statutory subject matter because both recite a method or process without reciting a machine or transformation as required under *In Re Bilski*. Dependent claims 53 and 54 were rejected as well. In light of the amendment to claim 38, now reciting an encoding unit and in light of the amendment to claim 52, now reciting a storage unit and a decoding unit, as suggested by the Examiner during the personal interview, Applicants submit that claims 38 and 52-54 recite statutory subject matter.

Claims 61 and 63 were also rejected as being directed to non-statutory subject matter. Claims 61 and 63 have been amended and are now independent claims that include a computer readable medium, as suggested by the Examiner. In light of the amendments to claims 61 and 63, Applicants submit that claims 61 and 63 recite statutory subject matter.

Thus, Applicants respectfully request that the §101 rejection of claims 38, 52-54, 61 and 63 be withdrawn.

Claim Rejections under 35 U.S.C. § 112, second paragraph

Claims 30-31, 36-38, 43-46, 51-54 and 59-64 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Claim 62 has been canceled and thus the rejection as to this claim has been rendered moot. The rejection as to the remaining claims is respectfully traversed.

Initially, Applicants disagree with the Examiner's assertion that the phrase "predetermined order relationship is determined by the order of magnitude of resolution of the rational number" renders the claims indefinite. Applicants respectfully submit that the Examiner's focus during examination for compliance with the requirement of definiteness in § 112, second paragraph is whether the claim meets the threshold requirements of clarity and precision. To do this, the Examiner needs only ensure that the claims define the invention with a reasonable degree of particularity and distinctness. *See MPEP § 2173.02.*

Although Applicants do not necessarily agree with the Examiner's assertion of indefiniteness, Applicants have amended claims 30, 31, 37 and 38 to further clarify the claim language as discussed during the Personal Interview on April 23, 2009, in order to expedite prosecution. More specifically, Applicants have amended claims 30, 31, 37 and 38 to separately recite "an encoding unit for outputting a code corresponding to the branch layer". Thus, it is clear that the definition of position information and that a "predetermined order relationship is determined by the order of magnitude of resolution of the rational number" does not modify the preceding encoding unit, but in fact relates to the whole claim. Claims 44 and 52 already recite precedent language of "position information" and thus clearly recites how a rational number is related to a "predetermined order relationship is determined by the order of magnitude of resolution of the rational number".

Moreover, the Examiner asserts that claims 30, 31, 37, 38, 44 and 52 recite "the same layer" and there is insufficient antecedent basis for this limitation. In light of the amendment to claims 30, 31, 37, 38, 44 and 52, it is respectfully requested that this rejection be withdrawn.

Also, the Examiner asserts that claims 30, 31, 37, 38, 44 and 52 recite "the order of magnitude resolution" and there is insufficient antecedent basis for this limitation. In light of the amendment to claims 30, 31, 37, 38, 44 and 52, it is respectfully requested that this rejection be withdrawn.

Furthermore, the Examiner asserts that claim 64 recites "each rational number in line 1" and there is insufficient antecedent basis for this limitation. The phrase does in fact have antecedent basis in that both claims 30 or 31, from which claim 64 depends, recite rational number position information (plural), each represented by a rational number. Therefore, there may be a plurality of rational numbers and thus "each rational number" has antecedent basis. Thus, it is respectfully requested this rejection be withdrawn.

Lastly the Examiner asserts that claims 60 and 62 are indefinite because they recite a computer readable medium causing the computer to function as devices. In light of the amendment to claim 60 and cancellation of claim 62, it is respectfully requested that this rejection be withdrawn as to all claims.

Thus, Applicants respectfully request that the §112, second paragraph rejections be withdrawn.

CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Notice of same is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Charu K. Mehta, Reg. No. 62,913, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: May 11, 2009

Respectfully submitted,

By 

Michael R. Cammarata
Registration No.: 39,491
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant